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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/665,493	09/20/2000	William C. Manning JR.	PP01588.005 (20263-40)	1563
27476	7590 12/19/2001			
Chiron Corporation Intellectual Property - R440 P.O. Box 8097			EXAMINER	
			TON, THAIAN N	
Emeryville, CA 94662-8097			ART UNIT	PAPER NUMBER
			1632	la.
		•	DATE MAILED: 12/19/2001	l&

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office A 44 C		09/665,493	MANNING ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Thaian N. Ton	1632			
Period fo	- The MAILING DATE of this communication apr Reply	ppears on the cover sheet	with the correspondence address			
- Exten after S - If the - If NO - Failur - Any re	DRTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION sions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a re period for reply is specified above, the maximum statutory period e to reply within the set or extended period for reply will, by statu- tiply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a ply within the statutory minimum of the d will apply and will expire SIX (6) MC	a reply be timely filed nirty (30) days will be considered timely. DNTHS from the mailing date of this communication.			
1)	Responsive to communication(s) filed on					
2a)□		his action is non-final.				
3)	Since this application is in condition for allow	ance except for formal ma	atters prosperition on to the marite is			
	closed in accordance with the practice under	Ex parte Quayle, 1935 C	C.D. 11, 453 O.G. 213.			
Disposition	on of Claims					
4)🛛 (Claim(s) $1-44$ is/are pending in the applicatio	n.				
4	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) 🗌 (Claim(s) is/are allowed.					
6)□ (Claim(s) is/are rejected.					
7) 🗌 (Claim(s) is/are objected to.					
8)🛛 (Claim(s) <u>1-44</u> are subject to restriction and/or	election requirement.				
Application	n Papers					
9)□ ⊤	he specification is objected to by the Examine	er.				
10)∐ T	he drawing(s) filed on is/are: a)□ acce	pted or b) objected to by	the Examiner.			
	Applicant may not request that any objection to the	ne drawing(s) be held in abey	/ance. See 37 CFR 1.85(a).			
11)∐ TI	he proposed drawing correction filed on	_ is: a) ☐ approved b) ☐	disapproved by the Examiner.			
	If approved, corrected drawings are required in re	ply to this Office action.				
12)∐ TI	ne oath or declaration is objected to by the Ex	kaminer.				
Priority un	der 35 U.S.C. §§ 119 and 120					
13) 🗌 🛚 A	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).			
	a) ☐ All b) ☐ Some * c) ☐ None of:					
1	. Certified copies of the priority document	ts have been received.				
2	2. Certified copies of the priority documents have been received in Application No.					
	Copies of the certified copies of the prio application from the International Bu e the attached detailed Office action for a list	rity documents have beer reau (PCT Rule 17 2(a))	received in this National Stage			
	knowledgment is made of a claim for domest					
a)	☐ The translation of the foreign language pro knowledgment is made of a claim for domest	ovisional application has b	een received			
Attachment(s	•					
2) Notice (3) Informa	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) tion Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)			
S. Patent and Trad PTO-326 (Rev.	04.04)	ction Summary	Part of Paper No. 10			

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DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-16, 22-25, and 27-29, drawn to a method of treating or preventing disease of the eye comprising intraocularly administering a gene delivery vector expressing neurotrophic factors, classified in class 514, subclass 44, for example.
- II. Claims 17-22, and 26-29, drawn to a method of inhibiting neovascular disease of the eye, by administering intraocularly a gene therapy vector that directes the expression of an anti-angiogenic factor, classified in class 514, subclass 44, for example.
- III. Claims 30-44, drawn to a non-human animal model of neovascularization of the eye, methods of making the non-human animal, and methods for determining the ability of an anti-angiogenic factor to inhibit neovascularization of the eye, classified in class 800, subclasses 3, 18, 21, 22, 25, class 435, subclasses 455, 463, 320.1, 325, class 424, subclass 9.2, for example.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are mutually exclusive and independent methods. The method of treating or preventing diseases of the eye in Invention I is not required for the implementation of the method for inhibition of neovascular disease of the eye of Invention II, and vice versa. Furthermore, each of the methods requires a materially different and separate protocol, and they require expression of proteins with distinct biological properties.

Invention I and Invention III are mutually exclusive and independent. The method of treating or preventing diseases of the eye in Invention I is not required for the

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implementation is not required for the non-human animal model and methods of making and using the non-human animal model of Invention III and vice versa.

Invention II and Invention III are mutually exclusive and independent. The method for inhibition of neovascular disease of the eye of Invention II is not required for the implementation is not required for the non-human animal model and methods of making and using the non-human animal model of Invention III and vice versa.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention:

If Applicants elect **Group I**, they are required for further elect a species from each of the following groups:

A: Neurotrophic factors: NGF, BDNF, CNTF, NT-3, FGF, FGF-2, FGF-5, FGF-18, FGF-20 or FGF-21 (Within claims 2, 3, or 4).

B: Eye diseases:

- (i) Denerative eye diseases: Claims 5, 7, 8
- (ii) Retinopathy: Claims 6, 10, 12, 13, 14
- (iii) Glaucoma: Claim 9
- (iv) Retinal detachment: Claim 11

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If Applicants elect **Group II**, they are further required to elect a species from the following group:

A: Antiangiogenic factors: soluble Flt-1, PEDF, and soluble Tie-2 receptor or single chain anti-VEGF antibody (Claims 18, 26)

If Applicants elect **Group III**, they are further required to elect a species from the following group:

A: Angiogenic transgene encoding: VEGF, angiopoietin (claims 33, 34, 40, 41).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thaian N. Ton whose telephone number is (703) 305-1019. The examiner can normally be reached on Monday through Friday from 8:00 to 5:00 (Eastern Standard Time), with alternating Fridays off. Should the examiner be unavailable, inquiries should be directed to Karen Hauda, Supervisory Primary Examiner of Art Unit 1632, at (703) 305-6608. Any administrative or procedural questions should be directed to Patsy Zimmerman, Patent Analyst, at (703) 305-2758. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 308-8724.

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1632.

TNT

Thaian N. Ton Patent Examiner Group 1632 DEBORAH CROUCH PRIMARY EXAMINER GROUP 18007630

Devoral (Franch